

What is Claimed is:

1. A method for addressing dynamic random access memory,
with
5 - providing a row address and a column address to
addressing terminals of the memory, in intervals
provided by a timing clock signal,
characterised in
- dividing the row address and/or the column address into
10 parts, and
- providing the respective parts to the address terminals
at a rising, and a falling edge of the timing clock
signal.
- 15 2. The method of claim 1, wherein the respective parts are
provided to the address terminal at consecutive rising
and falling edges of the timing clock signal.
3. The method of claim 1, with dividing the row address
20 into two parts.
4. The method of claim 3, with providing the two parts of
the row address, respectively, at a first rising edge
and a first falling edge within a timing cycle of the
25 timing clock signal.
5. The method of claim 1, with dividing the column address
into two parts.
- 30 6. The method of claim 5, with the two parts of the column
address, respectively, after a latency time for
processing the row address at a first falling edge and

a following rising edge within a timing cycle of the timing clock signal.

- 5 7. The method of claim 6, with providing a latency of two rising edges for processing the row address.
8. The method of claim 1, with dividing the row address and/or the column address into more than two parts.
- 10 9. The method of claim 8, with providing the parts of the row address at rising and falling edges at the beginning of a timing cycle of the timing clock signal, respectively.
- 15 10. The method of claim 8, with providing the parts of the column address after a latency time for processing the row address at the falling and rising edges at the end of a timing cycle of the timing clock signal, respectively.
- 20 11. The method of claim 1, with providing a latency of two rising edges for processing the column address.
- 25 12. The method of claim 1, with processing the parts of the row address and/or the parts of the column address provided sequentially at the address terminals within the memory.
- 30 13. The method of claim 1, with processing parts of the row address within the memory before receiving the complete row address.
14. A dynamic random access memory device comprising

- address terminals for receiving address information, and address processing means for processing received row address and column address received via the address terminal,
- 5 **characterised in that**
- the address processing means receive at least parts of the row address and/or column address at rising and falling edges of a timing clock signal, respectively.
- 10 15. The memory device of claim 14, where a number of address terminals T is the address bus size ADR divided by N , such that $T = \left\lceil \frac{ADR}{N} \right\rceil$.
- 15 16. The memory device of claim 15, where N is the number of parts for the row address and/or the column address .
17. The memory device of claim 14, providing row data to a row buffer after the row address has been received.
- 20 18. A computer system comprising a central processing unit and a memory device, in particular according to claim 14, with
- an address bus providing row address and column address from the central processing unit to the memory device sequentially,
- 25
- a clocking device providing a timing clock signal with rising and falling edges,
- characterised by**
- address processing means dividing the row address
- 30 and/or the column address in parts, and

- providing the respective parts to address terminals of the memory device at rising and falling edges of the timing clock signal.
- 5 19. A computer program product with a computer program stored thereon for providing address information to a memory device for accessing data within the memory device, the program comprising instructions operable to cause a processor to,
- 10 - provide a row address and a column address to addressing terminals of the memory device sequentially,
- characterised by**
- dividing the row address and/or the column address
- 15 into parts, and
- providing the respective parts to the address terminals at a rising and a falling edge of a clock signal.
- 20 20. A use of a memory device of claim 14 in consumer electronic devices or mobile communication devices.
21. A mobile communication device comprising a memory device of claim 14.